

SEQUENCE LISTING

<110> Pharmacia & Upjohn
Gu, Yizhong

<120> Canine L-PBE Sequences

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<150> 60/437,530

<151> 2002-12-31

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<170> PatentIn version 3.1

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<211> 2169

<212> DNA

<213> Canis familiaris

<400> 1

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<212> PRT
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Ser Phe Gly Glu Pro Arg Lys Ser Asp Phe Val Leu Gly His Ile Val
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Asp Glu Ile Gln Arg Thr Glu Lys Pro Val Val Ala Ala Ile Gln Gly
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115 120 125
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Val Pro Ala Ala Leu Asp Leu Ile Thr Ser Gly Arg His Val Leu Ala
145 150 155 160
Asp Glu Ala Leu Lys Leu Gly Ile Leu Asp Glu Ile Val Asn Ser Asp
165 170 175
Pro Val Glu Glu Ala Ile Lys Leu Ala Gln Arg Ile Ser Asp Gln Ser
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Met Glu Ser Ile Phe Ser Glu Ala Leu Ser Lys Met Gln Lys Gln His
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Pro Gly Cys Leu Ala Pro Glu Thr Cys Val Arg Ala Val Gln Ala Ala
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 Trp Lys Thr Ala Ile Ala Gln Pro Ile Ser Ser Val Gly Val Val Gly
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Asp Pro Trp Leu Ser Glu Phe Leu Ser Gln Tyr Arg Lys Thr Tyr His
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Ile Glu Pro Arg Ile Ile Ser Gln Asp Glu Ile Leu Glu Arg Cys Leu
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Tyr Ser Leu Ile Asn Glu Ala Phe Arg Ile Leu Gly Glu Gly Met Ala
625 630 635 640

Ala Asp Pro Glu His Ile Asp Val Val Tyr Leu His Gly Tyr Gly Trp
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Pro Arg His Arg Gly Gly Pro Met Phe Tyr Ala Ser Thr Val Gly Leu
660 665 670

Pro Thr Val Leu Glu Lys Leu Gln Lys Tyr Tyr Arg Gln Asn Pro Asp
675 680 685

Ile Pro Gln Leu Glu Pro Cys Asp Tyr Leu Lys Lys Leu Ala Ser Leu
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Ser Lys Leu

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 gctgatattc gtggcttcag tgctcctagg acatttggcc ttatactggg acatgtagta 240
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Gly Phe Ser Ala Pro Arg Thr Phe Gly Leu Ile Leu Gly His Val Val
 65 70 75 80
 Asp Glu Ile Gln Arg Asn Glu Lys Pro Val Val Ala Ala Ile Gln Gly
 85 90 95
 Met Ala Phe Gly Gly Gly Leu Glu Leu Ala Leu Gly Cys His Tyr Arg
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 Pro Val Glu Glu Ala Ile Arg Phe Ala Gln Arg Val Ser Asp Gln Pro
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 Leu Glu Ser Arg Arg Leu Cys Asn Lys Pro Ile Gln Ser Leu Pro Asn
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 Asn Lys Met Ile Thr Ser Val Leu Glu Lys Glu Ala Ser Lys Met Gln
 340 345 350
 Gln Ser Gly His Pro Trp Ser Gly Pro Lys Pro Arg Leu Thr Ser Ser
 355 360 365
 Val Lys Glu Leu Gly Gly Val Asp Leu Val Ile Glu Ala Val Phe Glu
 370 375 380

Glu Met Ser Leu Lys Lys Gln Val Phe Ala Glu Leu Ser Ala Val Cys
 385 390 395 400
 Lys Pro Glu Ala Phe Leu Cys Thr Asn Thr Ser Ala Leu Asp Val Asp
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 Glu Ile Ala Ser Ser Thr Asp Arg Pro His Leu Val Ile Gly Thr His
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 Phe Phe Ser Pro Ala His Val Met Lys Leu Leu Glu Val Ile Pro Ser
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 Gln Tyr Ser Ser Pro Thr Thr Ile Ala Thr Val Met Asn Leu Ser Lys
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 Ala Ser Pro Glu His Ile Asp Val Val Tyr Leu His Gly Tyr Gly Cys
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 Ala Arg His Lys Gly Gly Pro Met Phe Tyr Ala Ser Thr Val Gly Leu
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 Pro Thr Val Leu Glu Lys Leu Gln Lys Tyr Tyr Arg Gln Asn Pro Asp
 675 680 685
 Ile Pro Gln Leu Glu Pro Ser Asp Tyr Leu Lys Lys Leu Ala Ser Gln
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Gly Asn Pro Pro Leu Lys Glu Trp Gln Ser Leu Ala Gly Ser Pro Ser
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Ser Lys Leu

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<400> 14

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35 40 45

Val Ile Cys Gly Ala Asn Asp Asn Phe Cys Ala Gly Ala Asp Ile His
50 55 60

Gly Phe Lys Ser Pro Thr Gly Leu Thr Leu Gly Ser Leu Val Asp Glu
65 70 75 80

Ile Gln Arg Tyr Gln Lys Pro Val Val Ala Ala Ile Gln Gly Val Ala
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Leu Gly Gly Gly Leu Glu Leu Ala Leu Gly Cys His Tyr Arg Ile Ala
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Asn Ala Lys Ala Arg Val Gly Phe Pro Glu Val Met Leu Gly Ile Leu
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Pro Gly Ala Arg Gly Thr Gln Leu Leu Pro Arg Val Val Gly Val Pro
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Pro Arg Arg Ile Leu Asn Lys Pro Val Pro Ser Leu Pro Asn Met Asp
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Ser Val Phe Ala Glu Ala Ile Ala Lys Val Arg Lys Gln Tyr Pro Gly
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Arg Leu Ala Pro Glu Thr Cys Val Arg Ser Val Gln Ala Ser Val Lys
225 230 235 240

His Pro Tyr Glu Val Ala Ile Lys Glu Glu Ala Lys Leu Phe Met Tyr
245 250 255

Leu Arg Gly Ser Gly Gln Ala Arg Ala Leu Gln Tyr Ala Phe Phe Ala
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Glu Lys Ser Ala Asn Lys Trp Ser Thr Pro Ser Gly Ala Ser Trp Lys
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 Glu Phe Leu Ser Gln Tyr Arg Glu Thr His His Ile Lys Gln Arg Ser

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Ile Ser Lys Glu Glu Ile 610	Leu Glu Arg Cys Leu 615	Tyr Ser Leu Ile Asn 620
Glu Ala Phe Arg Ile 625	Leu Glu Glu Gly Met 630	Ala Ala Ser Pro Glu His 635 640
Ile Asp Val Ile 645	Tyr Leu His Gly Tyr 650	Gly Trp Pro Arg His Val Gly 655
Gly Pro Met 660	Tyr Tyr Ala Ala Ser 665	Val Gly Leu Pro Thr Val Leu Glu 670
Lys Leu Gln Lys Tyr Tyr 675	Arg Gln Asn Pro Asp 680	Ile Pro Gln Leu Glu 685
Pro Ser Asp Tyr Leu Arg 690	Arg Leu Val Ala Gln 695	Gly Ser Pro Pro Leu 700
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 35 40 45
 Val Ile Cys Gly Ala Asn Gly Asn Phe Cys Ala Gly Ala Asp Ile His
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 Gly Phe Ser Ala Phe Thr Pro Gly Leu Ala Leu Gly Ser Leu Val Asp
 65 70 75 80
 Glu Ile Gln Arg Tyr Gln Lys Pro Val Leu Ala Ala Ile Gln Gly Val
 85 90 95
 Ala Leu Gly Gly Gly Leu Glu Leu Ala Leu Gly Cys His Tyr Arg Ile
 100 105 110
 Ala Asn Ala Lys Ala Arg Val Gly Leu Pro Glu Val Thr Leu Gly Ile
 115 120 125
 Leu Pro Gly Ala Arg Gly Thr Gln Leu Leu Pro Arg Val Val Gly Val
 130 135 140
 Pro Val Ala Leu Asp Leu Ile Thr Ser Gly Lys Tyr Leu Ser Ala Asp
 145 150 155 160
 Glu Ala Leu Arg Leu Gly Ile Leu Asp Ala Val Val Lys Ser Asp Pro
 165 170 175

Val Glu Glu Ala Ile Lys Phe Ala Gln Lys Ile Ile Asp Lys Pro Ile
 180 185 190
 Glu Pro Arg Arg Ile Phe Asn Lys Pro Val Pro Ser Leu Pro Asn Met
 195 200 205
 Asp Ser Val Phe Ala Glu Ala Ile Ala Lys Val Arg Lys Gln Tyr Pro
 210 215 220
 Gly Val Leu Ala Pro Glu Thr Cys Val Arg Ser Ile Gln Ala Ser Val
 225 230 235 240
 Lys His Pro Tyr Glu Val Gly Ile Lys Glu Glu Glu Lys Leu Phe Met
 245 250 255
 Tyr Leu Arg Ala Ser Gly Gln Ala Lys Ala Leu Gln Tyr Ala Phe Phe
 260 265 270
 Ala Glu Lys Ser Ala Asn Lys Trp Ser Thr Pro Ser Gly Ala Ser Trp
 275 280 285
 Lys Thr Ala Ser Ala Gln Pro Val Ser Ser Val Gly Val Leu Gly Leu
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 Gly Thr Met Gly Arg Gly Ile Ala Ile Ser Phe Ala Arg Val Gly Ile
 305 310 315 320
 Ser Val Val Ala Val Glu Ser Asp Pro Lys Gln Leu Asp Ala Ala Lys
 325 330 335
 Lys Ile Ile Thr Phe Thr Leu Glu Lys Glu Ala Ser Arg Ala His Gln
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 Asn Gly Gln Ala Ser Ala Lys Pro Lys Leu Arg Phe Ser Ser Ser Thr
 355 360 365
 Lys Glu Leu Ser Thr Val Asp Leu Val Val Glu Ala Val Phe Glu Asp
 370 375 380
 Met Asn Leu Lys Lys Lys Val Phe Ala Glu Leu Ser Ala Leu Cys Lys
 385 390 395 400
 Pro Gly Ala Phe Leu Cys Thr Asn Thr Ser Ala Leu Asn Val Asp Asp
 405 410 415
 Ile Ala Ser Ser Thr Asp Arg Pro Gln Leu Val Ile Gly Thr His Phe
 420 425 430
 Phe Ser Pro Ala His Val Met Arg Leu Leu Glu Val Ile Pro Ser Arg
 435 440 445
 Tyr Ser Ser Pro Thr Thr Ile Ala Thr Val Met Ser Leu Ser Lys Lys
 450 455 460
 Ile Gly Lys Ile Gly Val Val Val Gly Asn Cys Tyr Gly Phe Val Gly
 465 470 475 480
 Asn Arg Met Leu Ala Pro Tyr Tyr Asn Gln Gly Phe Phe Leu Leu Glu
 485 490 495

Glu Gly Ser Lys Pro Glu Asp Val Asp Gly Val Leu Glu Glu Phe Gly
 500 505 510
 Phe Lys Met Gly Pro Phe Arg Val Ser Asp Leu Ala Gly Leu Asp Val
 515 520 525
 Gly Trp Lys Ile Arg Lys Gly Gln Gly Leu Thr Gly Pro Ser Leu Pro
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 Pro Gly Thr Pro Val Arg Lys Arg Gly Asn Ser Arg Tyr Ser Pro Leu
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 Gly Asp Met Leu Cys Glu Ala Gly Arg Phe Gly Gln Lys Thr Gly Lys
 565 570 575
 Gly Trp Tyr Gln Tyr Asp Lys Pro Leu Gly Arg Ile His Lys Pro Asp
 580 585 590
 Pro Trp Leu Ser Thr Phe Leu Ser Gln Tyr Arg Glu Val His His Ile
 595 600 605
 Glu Gln Arg Thr Ile Ser Lys Glu Glu Ile Leu Glu Arg Cys Leu Tyr
 610 615 620
 Ser Leu Ile Asn Glu Ala Phe Arg Ile Leu Glu Glu Gly Met Ala Ala
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 Arg Pro Glu His Ile Asp Val Ile Tyr Leu His Gly Tyr Gly Trp Pro
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 Arg His Lys Gly Gly Pro Met Phe Tyr Ala Ala Ser Val Gly Leu Pro
 660 665 670
 Thr Val Leu Glu Lys Leu Gln Lys Tyr Tyr Arg Gln Asn Pro Asp Ile
 675 680 685
 Pro Gln Leu Glu Pro Ser Asp Tyr Leu Arg Arg Leu Val Ala Gln Gly
 690 695 700
 Ser Pro Pro Leu Lys Glu Trp Gln Ser Leu Ala Gly Pro His Gly Ser
 705 710 715 720
 Lys Leu